

REVISION OF THE GENERA *ETHON*, *CISSEIS* AND THEIR ALLIES.
(*BUPRESTIDAE*.)

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(Twelve Text-figures.)

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The genera *Ethon* and *Cisseis* were first published by Castelnau and Gory in their famous "Monograph." Their diagnoses of these genera, together with the list of species, were so confused as to require considerable modification at the hands of later authors; e.g., these genera were distinguished, *inter alia*, by the alleged differences in the respective number of joints of the palpi; while of the eight species placed by them under *Ethon*, four, at least, are now referred to *Cisseis*. For a complete diagnosis of *Ethon* and of *Cisseis* see Kerremans (*Genera Insectorum*, 1902, pages 226 and 227).

Ethon is clearly differentiated from *Cisseis* by two characters in combination: (1) a strongly bilobed head, (2) the clearly longitudinal punctate elytra. The claws of their tarsi are long and bifid, somewhat as in *Neospades*, appearing as four equally long sharp spines. The posterior basal joints are, however, more elongate than in *Neospades*, the basal joint being the longest, while joints 2, 3 and 4 are of nearly equal length. The nomenclature has been complicated by mis-identification and synonymy and the following table and notes on the species will, it is hoped, simplify the study by our future workers.

Both *Ethon* and *Cisseis* occur on flowers of many species. I have taken *E. corpulentum* and *E. affinis* chiefly on *Dillwynia*, *Pultenea* and *Leptospermum* in the Sydney region.

Froggatt (*Australian Insects*, p. 165) states that "*E. affinis* forms galls upon the stems of *Pultenea stipularis*," while *E. corpulentum* and *E. marmoratum* (? *Cisseis aceducta* Kirby) "make rounded galls upon the roots of *Dillwynia ericifolia*, sometimes as many as 20 on one plant, clustering round the base of the stem."

	No. of names investigated	No. of species considered valid	No. of new species added
1 <i>Ethon</i>	12	5	1
2 <i>Cisseis</i>	86	38	7
3 <i>Neospades</i>	17	10	—
4 <i>Hypocisseis</i>	13	5	2
5 <i>Alcinous</i>	2	1	—
	—	—	—
Total	130	59	10
	—	—	—

Thus after rejecting names that are either preoccupied, synonyms, or *nomina nuda*, 130 names are reduced to 59, while 10 new species are here recorded. Future investigation may suggest some modification of this treatment; but at least clearer identification of existing species and their correct nomenclature is now possible.

Table of species of Ethon.

1	6	Colour bronze or coppery with pubescent fascicles.	
2	4	Form oblong oval, underside subglabrous.	
3		Surface nitid, elytral punctures scratch-like.	<i>affine</i> C. & G.
4		Surface duller, elytral punctures coarser.	<i>roei</i> Saund.
5		Form sub-conical and convex, underside strongly pilose.	<i>corpulentum</i> Boh.
6		Form shortly ovate, underside subglabrous.	<i>breve</i> , n.sp.
7		Colour opaque violet, form elongate-conic, striation of elytra sub-continuous.	<i>maculatum</i> Blkb.
8		Colour bronze-green without fascicles.	<i>fissiceps</i> Kirby.

Synonymy. (a) *affine* C. & G. = *aurifluum* Hope = *purpurascens* Hope = *proxima* Boh. = *reichei* Chev.

(b) *fissiceps* Kirby, (?) Boisd. = *viride* C. & G. = *diversum* Kerr.

(c) *corpulentum* Boh. = *fissiceps* C. & G. (*nec* Kirby).

(d) *roei* Saund. = *subfasciatum* Saund.

I have seen the types of all except *proxima*, *viride* and *corpulentum*. It is quite evident that *fissiceps* was wrongly determined in the Monograph of Castelnau and Gory, and equally evident that the figure given by them as *fissiceps* is that of *corpulentum* Boh., having the distinguishing oblique fasciation at the apex.

(b). obviously identical.

(d). I think *subfasciatum* is the male of *roei*—the types being respectively ♂ and ♀ of the common species from Western Australia, variable in size, and the pubescence readily abraded—as in the type of *roei*—which is almost uniform bronze with a duller surface than in *affine*.

The species *corpulentum* Boh. and *affine* C. & G. are common on the flowers of *Dillwynia*, near Sydney, in September and October. The former is easily separated (i.) by its strongly pilose underside, (ii.) by apical markings; a sub-apical zig-zag fascia, and behind this, two obliquely outwardly directed markings. *E. affine* has a wide distribution through Eastern and South-East Australia. *E. maculatum* Blackb., type in British Museum, measures $9\frac{1}{2} \times 4$ mm., though given as $3\frac{3}{5}$ - $4\frac{2}{5}$ lines. This apparently is found in New South Wales and Queensland as well as in South Australia, from examples I find in collections, and is recognised by the combination of conical form, dingy, vaguely-spotted, violaceous upper surface—the pubescent fascicles being distributed more or less over the whole elytra—with nitid, subglabrous underside. *E. scabiosum* Boisd., misspelt *scabiorum* in Castelnau and Gory's Monograph, is quite unknown to me—though probably a *Cisseis*, if the figure of the "Monograph" be correct.

The following species is undescribed:

ETHON BREVE, n.sp. (Text-fig. 1.)

Shortly ovate, convex. Head, prothorax and abdomen coppery, elytra purple-violet with three undefined fascicles on apical half and sub-obsolete fascicles on basal half; underside nitid and feebly tomentose, sides of abdomen albo-squamose.

Head strongly bilobed.



Text-fig. 1

Prothorax short, strongly widened from apex to base; anterior angles obtusely rounded, posterior acute, base strongly sinuate, the medial lobe widely oval, surface more finely sculptured than in *E. roei* Saund. or *maculatum* Blkb. with little transverse sculpture. *Scutellum* large, triangular and smooth. *Elytra* widest near base, thence arcuately narrowed to apex, seriate-punctate, the punctures linear, less elongate than in *maculatum* Blkb., narrower than in *roei* Saund. Underside finely, closely punctate. *Dim.* 6-7 x 3-3.3 mm.

Hab.—Western Australia: Perth (J. Clark, and Brit. Mus.), Wyndham (J. Clark).

A species I cannot reconcile with described species—through its shorter oval form, nitid underside, the short prothorax—strongly narrowed in front. Types in Coll. Carter. The sexes taken *in cop.* by Mr. Clark.

VAR. (?).—Three examples taken by Mr. A. H. Elston at Mt. Lofty, near Adelaide (S.A.), have the head and pronotum dull coppery bronze, the elytra purple-bronze, and are more elongate-ovate (narrower) than the Western forms. 6-7 x 2½-3 (vix) mm. These have the fine sculpture of *breve*, but may prove to be a distinct species.

CISSEIS Castelnau et Gory.

Six species were originally named in the Monograph of the above authors, namely, *duodecim-guttata* Guér., *albosparsa* C. & G., *stigmata* C. & G., *irrorata* Hope, *marmorata* C. & G., and *cupripennis* Guér.; while, as noted above, at least four of the species included under *Ethon* belong to *Cisseis*. These are *leucostictum* Kirby, *bicolor* C. & G., *marmoreum* C. & G. and *maculatum* C. & G. *Westwoodi* was described as a *Coraebus*. This list omitted *cruciata* F. (for which see *Neospades*), *duodecim-maculata* F. and *acuducta* Kirby. *Duodecim-guttata* Guér. (also Boisd.) is the well known *12-maculata* F., of which I have examined the type in the British Museum. *Albosparsa* C. & G. is familiar as a widely distributed Queensland species.

Stigmata C. & G. is a well known Western Australian species.

Irrorata Hope was incorrectly determined by Castelnau and Gory, and is the species described by these authors as *marmorata*, and by Saunders as *similis*, while *irrorata* C. & G. is, I consider, the same as *maculata* C. & G. I have seen the types of Hope and Saunders. The species is well known from New South Wales and Victoria (see *infra*).

Cupripennis Guér. (also Boisd), described from Port Jackson, is a common species in South-Eastern Australia, and generally well known in Museums.

Leucosticta Kirby is widely distributed over the greater part of Australia, associated with *Acacia* foliage. As in all common species, there is great variation in size and colour. The type measures 14 x 5 mm., has a brassy pronotum and green underside; but green often replaces the brass of the prothorax and head, while I have examples from Geraldton, W.A., in which the thorax and underside are bronze (not coppery). *C. aurulenta* Kerr. is doubtfully distinct from this.

Bicolor C. & G. is readily determined in a widely oval species well known from Western Australia, but which I have taken rarely in New South Wales.

* *Ethon breve*, n.sp.

and occurs in Victoria and South Australia. It varies in size from 8 to 14 mm. long, while a dwarf in the British Museum Coll. is only 5 mm. long.

Marmorea C. & G. is the species better known as *acuducta* Kirby, which has many synonyms and a wide distribution; probably the commonest species in Eastern Australia. Kerremans erroneously placed *marmorata* C. & G. under *acuducta* in the Genera Insectorum, instead of *marmorea*.

Maculata C. & G. is a small, narrow species, common, especially in Victoria and Tasmania, on *Leptospermum*. The white pubescence is readily rubbed from this otherwise bronze species, so that it rarely appears as in the figure of the Monograph; except as to the four apical spots (if Kerremans identification and my own are correct). I have not seen the type.

In 1832 Hope redescribed *12-maculata* F. under the name *xanthosticta*. In 1836 he published *irrorata*, *lata* and *aenea* (of which the last two = *acuducta* Kirby). In 1845 he added *roseocuprea*, *signaticollis*, *gouldii*, *cupreicollis* (with its female form *aeneicollis*), besides again repeating *12-maculata* as *14-notata*. Thus of 10 species, only 4 are to-day valid. I have examined all his types.

In 1848 Germar described four species, *notulata*, *chrysopygia*, *nubeculosa* and *chalcoptera*. Of these, the first has been identified by Blackburn—whose authority as a long resident in the Adelaide District, and as a keen and able entomologist, carries weight—and I have followed him in this. The species is widely distributed throughout South Australia, Victoria and New South Wales.

For *chrysopygia*, see under *Neospades*.

Nubeculosa and *chalcoptera* are the respective female and male of the same species, the thorax of the male being metallic green; that of the female bronze. Analogous sexual colouration occurs at least in *cupripennis* Bois., *marmorata* C. & G. and, probably, in other species.

In 1868 Saunders described *similis* and *suturalis*. The latter is referred below to *Hypocisseis*, the former sunk as a synonym.

Macleay (1872 and 1888) described eight species, of which *latipennis* is a *Hypocisseis*, *dimidiata*, *apicalis* and *purpureotincta* are forms of the varicoloured *chrysopygia* Germ., *impressicollis* and *nigripennis* are, I think, synonyms of *roseocuprea* Hope and *Neospades simplex* Blackb. respectively, thus leaving only two valid species, *viridiaurea* and *fulgidicollis*, of which the former is a *Neospades*.

In 1876 Gestro described (Ann. Mus. Gen., viii.) two species *albertisii* and *cuprifera* from Cape York (omitted by Kerremans from Gen. Ins.); the former of these is almost certainly synonymous with *albo-sparsa* C. & G., the latter is a *Neospades* of unusual beauty that occurs in Northern and North-West Australia.

In 1879 Thomson published descriptions of thirteen species, of which seven are probably valid. I have not, however, seen his types.

Regalis is, I think, an elongate species near *leucosticta* Kirby and *fulgidicollis* Mael., much less convex than the former, with a more sparse puncturation—the elytra violet-purple with irregular white pubescent spots. In Macleay's species, the form is generally less elongate and wider, with the pubescent spots definite in number and position. *Opima*, *rugiceps*, *subcarinifrons*, *uniformis* and *minutissima* will be found in my tabulation and notes subjoined to this. *Atro-violacea*, as determined by Kerremans, varies from the description of that species in smaller size. *Semiscabrosa*, I have not been able to identify—it is probably one of the many forms of *Neospades chrysopygia* Germ. *Viridicollis* is, I consider, the male of *marmorata* C. & G., but I have no decisive field evidence of this. The remaining four are obvious synonyms (*see below*).

Between 1887-1891 Blackburn described 13 species, including *Neospades simplex* and *N. lateralis*; besides *Hypocisseis* (Coraeus) *pilosicollis*. Of Blackburn's species, *bella* is probably only a form of *N. simplex*; *dispar* = *roseocuprea* Hope, *verna* = *westwoodi* C. & G. while *constricta* and *lindi* are, I think, the respective sexes of the same species. This leaves nine valid species.

In 1898 and 1902 Kerremans described one *Ethon* and 41 species of *Cisseis* from Australia (including two species of *Neospades*). I have seen all his types. *E. diversum* is an obvious synonym of *E. fissiceps* Kirby, of which the type is also in the British Museum. Of the 41 species, I can only recognise 12 as distinct from previously described species. These are *scabrosula*, *aurulenta*, *nitidicollis*, *viridiceps*, *vicina*, *callaris*, *cyanura*, *nigro-aenea*, *viridis*, *fossicollis*, *rubicunda* and *puella*, of which *aurulenta* is doubtfully separable from *leucosticta* Kirby, *collaris* is doubtfully distinct from *vicina*, while *nigroaenea* and *viridis* are referred to *Neospades*. The synonymy of the remaining 29 species is stated below. Many of the types are uniques—often mere variations from small species that are difficult of distinction.

One other Australian *Cisseis* has been described by Théry as *C. terrae-reginae*. A specimen so labelled by Dr. Obenberger has been sent me, and corresponds to the description. It is a *Neospades* very near to, but distinguished from, *N. viridaurea* Mael. (See tabulation below).

Buprestis lapidosa W.S. Mael.—This species is wrongly placed amongst *Cisseis* in the Genera Insectorum, and other catalogues. The type is in the Macleay Museum, Sydney. It cannot be referred to any existing Australian genus, and is probably a misplaced exotic or, as in the case of *B. aurulenta* F., a species bred in Australia from imported timber. Writing from memory in London, it is near the American genus *Dicerca*.

The following tables will show my present view of the Genera *Ethon*, *Cisseis*, *Neospades*, *Hypocisseis* and *Alcinous*.

The following tabulation, it is hoped, will help to determine the species.

CISSEIS. Sect. i.

Elytra clearly impressed with white pubescent spots.

- | | | | |
|----|----|--|----------------------------|
| 1 | 6 | Ground colour of elytra dark blue. | |
| 2 | 4 | Pronotum blue, with pubescent vitta above lateral carina. | |
| 3 | | Disc without foveate impressions (8-10 x 4 mm.) | <i>12-maculata</i> F. |
| 4 | | Disc with two foveate impressions (5-7 x 2-2½ mm.) | <i>elongatula</i> Blkb. |
| 5 | 7 | Pronotum coppery or brassy green, disc with pubescent foveate impressions. | |
| 6 | | Pronotum (except on foveae) and underside glabrous. | <i>stigmata</i> C. & G. |
| 7 | | Pronotum with inter-carinal space also sides of abdomen pubescent. | <i>signaticollis</i> Hope. |
| 8 | | Pronotum coppery (♂) or bluish (♀) without pubescence, size small (5-7 mm. l.) | <i>cupreicollis</i> Hope. |
| 9 | 15 | Ground colour of elytra purple—sometimes blue (In this case distinguished from preceding by the coarsely punctate pronotum). | |
| 10 | 12 | Elytral spots indefinite in number, irregularly spaced. | |
| 11 | | Form robust and convex—pronotum densely and coarsely punctate. | <i>leucosticta</i> Kirby. |
| 12 | | Form subdepressed, narrower than 11, pronotum sparsely punctate. | <i>regalis</i> Thoms. |
| 13 | 15 | Elytral spots definite in number, eight arranged in a circle. | |
| 14 | | Form elongate, disc of pronotum subsparingly punctate. | <i>fulgidicollis</i> Mael. |
| 15 | | Form widely ovate, pronotum finely rugose-punctate. | <i>bicolor</i> C. & G. |
| 16 | 18 | Upper surface golden (pronotum sometimes green in <i>aurulenta</i>). | |

- 17 Elytra multi-maculate. *aurulenta* Kerr.
 18 Elytra with eight spots, definitely arranged. *albo-sparsa* C. & G.
 19 Pronotum fiery copper, elytra brownish; the spots less defined than in 18.
 *inflammata*, n.sp.

C. aurulenta Kerr. is possibly a small var. of *leucosticta* Kirby, a very variable species, widely distributed throughout Australia.

In the Monograph of Cast. et Gory, the figure of *albosparsa* shows only six spots. Fresh examples, however, show eight.

N.B.—The very distinct species 11, 12 and 14 (*supra*) are much confused in collections.

C. cupreicollis Hope, is extremely like *Neospades simplex* Blkb., but has quite different tarsal claws, besides being shorter and less cylindrical in form.

C. elongatula Blackb.—The type of this, in the South Australian Museum, is a badly abraded example that makes identification difficult. There are, however, so few Cisseis that combine the pubescent lateral vitta of pronotum with spotted elytra, that I consider three fresh examples in the same collection as conspecific. In these the elytra are clearly blue, with the spots arranged very much as in *12-maculata*, showing also (in two examples) smaller, scattered, pubescent spots.

Synonymy.

(a) *duodecemmaiculata* F. = *12-guttata* Boisd. = *14-notata* Hope = *xanthosticta* Hope = *pustulata* Thoms.

(b) *leucosticta* Kirby = *stellulata* Dalm. = *fulgidifrons* Kerr.

(c) *cupreicollis* Hope = *aeneicollis* Hope (♂) = *morosa* Kerr.

(d) *albosparsa* C. & G. = *albertisii* Gestro = *cupriventris* Kerr.

(a) Occurs from East to West of the Continent, breeding in, and found on leaves of *Xanthorrhoea* plants.

(b) is perhaps the most widely distributed Cisseis in Australia, found in every state on *Acacia* foliage; I have examples from Geraldton, W.A., in which the pronotum and underside are bronze (not coppery), with the upper surface more coarsely punctured than usual. The type of *fulgidifrons* is only a small male of typical form and colour.

(c) The type of *morosa*, is an abraded and discoloured *cupreicollis* Hope (var. *aeneicollis* Hope).

CISSEIS. Sect. ii.

Elytra vaguely impressed with white pubescence.

Group A. Pubescence, in fresh examples, forming more or less circular spots.

- 1 4 Size large (10-13 mm.), pronotum and underside sexually coloured (♂ green or bronze, ♀ more or less concolorous, with elytra rarely green).
 2 Form parallel, elongate—bronze or bronze green. *marmorata* C. & G.
 3 Form widely oval, sides of pronotum well rounded, colour purple, or purple bronze. *nubeculosa* Germ.
 4 Form as in 3 but more acuminate behind, sides of pronotum nearly straight on basal half—colour dark bronze. *opima* Thoms.
 5 9 Form elongate-ovate—subparallel.
 6 Size medium (8-9 mm.), head usually bilobed, pronotum, base and apex of elytra bright purple, rest of elytra violaceous. *rugiceps* Thoms.
 7 Size small (5½-7 mm.). Pronotum and underside coppery bronze, elytra brilliant purple or violet. *tyrrhena*, n.sp.

8 More or less concolorous, bronze, spots, except apical 4, very vague. *maculata* C. & G.

9 Pronotum brassy, or coppery green, elytra blue-black. *nitidicollis* Kerr.

Notes on the above.—*C. marmorata* C. & G. is the large well-known species not uncommon in New South Wales and Victoria, of which the male is narrower and with metallic green or bronze pronotum and underside, described as *viridicollis* Thoms., and of which I have elsewhere described a bright green variety. The pubescence is often abraded—and obscure as in all the above.

Nubeculosa Germ. is the female, *chalcoptera* Germ. the male of the same species—as recorded by Blackburn. The male is not unlike, when the pubescence is absent, a large sized *cupripennis* Boisd. It is common in South Australia and Western Victoria.

Opima Thoms. is more triangular and of darker colour than *nubeculosa*, with a very differently shaped pronotum, wide but straight-sided behind, roundly narrowed in front. The males are similar in form but smaller. This species, apparently, only occurs in Western Australia.

Rugiceps Thoms. is noteworthy for its strongly excavate head, which, together with the pronotum, is unusually strongly sculptured—the sculpturing of the pronotum consisting chiefly of undulate transverse ridges. The purple colour carried over to the base of elytra is noteworthy, as also the same colour on apex, together with its green abdomen.

C. maculata C. & G.—I have accepted the determination of Tasmanian examples in the British Museum for this species, of which I have been unable to find the type; the pubescence is generally very vague, except as to the apical four spots. It is also the species described by Kerremans as *tasmanica*, indistinguishable from *pauperula* Kerr. (per type).

C. nitidicollis Kerr. is very like *ignicollis* Kerr. (= *Neospades simplex* Blkb.), but the pronotum is much wider, and the claws those of *Cisseis*.

Synonymy.—(a) *marmorata* C. & G. = *similis* Saund. = *irrorata* Hope (nec C. & G.) = *viridicollis* Thoms. = *aenea* Kerr.

(b) *nubeculosa* Germ. = *chalcoptera* Germ.

(c) *maculata* C. & G. = *tasmanica* Kerr. = *pauperula* Kerr.

Group B. Pubescence, in fresh examples, *not* in spots; more or less marbled.

1 26 Head not, or very feebly excavate between eyes.

2 4 Size large (12-14 mm. long).

3 Elongate obovate, prothorax wider than base of elytra. *laticollis*, n.sp.

4 Ovale elliptic, prothorax narrower than base of elytra. *elliptica*, n.sp.

5 9 Size smaller, (10 mm. long or less).

6 Whole surface green, elytra coppery green; form like *opima*. *ovalis*, n.sp.

7 9 Upper surface more or less bronze.

8 Rather widely oval, elytra nitid (8-10 mm. long). *acducta* Kirby.

9 Narrowly oval, elytra with opaque subcyaneous patch. (6-7 mm. l.).

. *scabrosula* Kerr.

10 12 Size small (4.5 mm. long).

11 Prothorax narrowing to apex, lateral carina not evident from above; tinged cyaneous. *parva* Blackb.

12 Prothorax normally arcuate, lateral carina evident from above.

. *viridiceps* Kerr.

13 22 Pronotum and elytra differently coloured, the former more or less brilliantly metallic.

- 14 Form oval, pronotum golden copper, elytra amethyst blue. *pulchella*, n.sp.
 15 25 Form narrowly ovate.
 16 18 Elytra blue black.
 17 Pronotum bright bronze. *atroviolacea* Kerr. (? Thoms.)
 18 Pronotum metallic green. *vicina* Kerr.; ? *collaris* Kerr.
 19 Elytra violaceous, pronotum igneous purple, this colour more or less invading basal part of elytra. *notulata* Germ.; ? *violacea* Kerr.;
 ? *nigrita* Kerr.
 20 22 Elytra purple, pronotum bronze or coppery.
 21 Pubescence in scattered patches over whole elytra. *obscura* Blackb.
 22 Pubescence confined to apical areas. *rubicunda* Kerr.
 23 25 Upper surface metallic green.
 24 Pronotum with large, deep fovea on each side. *fossicollis* Kerr.
 25 Pronotum without such foveae. *westwoodi* C. & G.
 26 Form cylindric, upper surface blue-black. *cyanura* Kerr.
 27 Head strongly excavated between eyes, pubescence scattered over whole elytra. *pygmaea* Blackb.
 28 Smaller and more parallel than preceding. *puella* Kerr.

Semi-scabrosa Thoms. has been omitted from the above as unknown to me.

It is possibly a variety of *chrysopygia* Germ.

The species, especially the smaller ones (the greater number), of this section are very difficult to separate. Little is known of their sexual relation, and there is often a strong sexual colouration in the genus; while old, badly abraded or stained examples often present a widely different appearance from fresh examples. Where more than one name appears under a number in the above tabulation it does not necessarily imply synonymy—but that the species are so close as to prohibit their clear tabulation by definite characters.

Synonymy.—(a) *acuducta* Kirby = *marmorea* C. & G. = *lata* Hope = *aenea* Hope = *cuprifrons* Kerr. = *laeta* Kerr.

(b) *collaris* Kerr. = *ornata* Kerr.

The types are identical—*vicina* is doubtfully separated from these by its larger size, but an examination of a longer series is necessary.

(c) *notulata* Germ.—Adopting Blackburn's determination of this South Australian species I consider that *inops* Kerr. and *semiobscura* Kerr. are identical with Germar's species, while *violacea* can only be distinguished by the fact that the elytra are wholly violet—whereas in the other three the basal area is more or less bright purple. *Nigrita* is, I think, but a dark form of the preceding. Thus *notulata* Germ. = *inops* Kerr. = *semiobscura* Kerr. = ? *violacea* Kerr. = ? *nigrita* Kerr.

(d) *obscura* Blackb. = *undulata* Kerr. = *purpurea* Kerr.

(e) *rubicunda* Kerr. = *modesta* Kerr.

Only slight colour difference separates the types. A western species.

(f) *parva* Blackb. = *simplex* Kerr.

(g) *viridiceps* Kerr. = *oblonga* Kerr.

(h) *westwoodi* C. & G. = *verna* Blackb. = *viridana* Kerr. = *théryi* Kerr.

Occurs in Victoria, Tasmania and South Australia.

(i) *puella* Kerr. = *curta* Kerr. I am doubtful as to the identity of this with *pygmaea* Blackb. Both have the Ethon-like head, and both occur in New South Wales, but *puella* is smaller and more parallel than *pygmaea*, while the less amount of pubescence on Kerremans' type may be accounted for by abrasion.

CISSEIS. Sect. iii.

Elytra without pubescent impressions.

- 1 3 Forehead with a medial carina.
- 2 Pronotum bronze, elytra violaceous, apex and apical margins coppery (8-9 mm. long). *careniceps*, n.sp.
- 3 Upper surface purple or coppery bronze, margins of pronotum tinged green (5-7 mm. long). *subcarenifrons* Thoms.; ? *occidentalis* Blackb.
- 4 12 Forehead without carina.
- 5 7 Upper surface dark.
- 6 Pronotum abruptly constricted at base, elytra purple bronze, margins coppery. *constricta* Blkb.
- 7 Sides of pronotum nearly straight. *perplexa* Blkb.
- 8 12 Upper surface brilliant metallic.
- 9 11 Sides of pronotum lightly rounded.
- 10 Whole surface coppery bronze (6-7 mm. l.). *roseo-cuprea* Hope.
- 11 Whole surface green, or bronze-green (3½-4 mm. l.). *minutissima* Thoms.
- 12 Sides of pronotum obliquely narrowed from base to apex, colour uniform green (5-6 mm. l.). *uniformis* Thoms.

Synonymy.—(a) *subcarenifrons* Thoms. = *cineta* Kerr. = (?) var. *occidentalis* Blkb.

Thomson's description corresponds with many examples from King George's Sound, that are certainly *cineta* Kerr. (The type of *occidentalis* is unique, I have been unable to match it. Smaller than Thomson's species, 5 mm. instead of 7 mm., it is also of brighter colour, with a slight difference in the form of the lateral carina but I think these are conspecific).

(b) *constricta* Blkb. = *lindi* Blkb. The former is the male, the latter the female, of the same species. Both forms occur in the British Museum Coll. from N.W. Aust., the male, as is frequent in the genus, having a bright metallic pronotum and head.

(c) *roseocuprea* Hope = *impressicollis* Macl. = *dispar* Blkb. = *cuprea* Kerr. = *fairmairei* Kerr.

I have seen the types of all of these and find the first four identical. The last is, I consider, a variety in which the head and pronotum are greenish, the sides of the latter slightly wider than usual. A common species in Victoria and South Australia.

(d) *uniformis* Thoms. = *coraeoides* Kerr. The dimensions were omitted in Thomson's casual description, but I have little doubt as to their identity. The examples examined are from Victoria and Tasmania.

Perplexa Blkb. has the claws of a typical *Cisseis* though like *Neospades nigroaenea* Kerr. in size and form. The colour of the elytra is quite different, being dark violet, while the punctures on both pronotum and elytra are much more lightly impressed than in *nigroaenea*. This is a Western species.

C. minutissima Thoms.—I have several examples that correspond with Thomson's description of this species from Perth (J. Clark) and Pinjarra, W.A. (A. M. Lea). It was described as from South Australia.

CISSEIS INFLAMMATA, n.sp. (Text-fig. 2.)

Elongate ovate; head (of ♂) green, (of ♀) fiery copper, pronotum, scutellum, underside and antennae fiery red copper, elytra brownish copper with green or blue tints near base, ruddy copper near apex, with some vaguely defined spots smaller than, but placed as, in *albo-sparsa* C. & G.

Head nearly flat, with feeble longitudinal impression, strongly, not densely, punctate.

Prothorax: Apex nearly straight, base lightly bisinuate, sides (seen from above) obliquely narrowed from base to apex—the lateral margin (limited by lower carina) rather widely rounded in a vertical plane, anterior angles obtuse, hind acute; upper carina not nearly extending to apex, disc without a sign of medial line, sparsely and finely punctate in middle, becoming transverse laterally.

Scutellum large, nitid and transverse, triangularly extended behind. *Elytra* widened at shoulder, rather strongly narrowed at apex; apices separately rounded and comparatively coarsely serrate, disc more distinctly punctate than usual, punctures large on basal half, fine and close near apex—the eight pubescent spots vaguely marked (in one example six spots only can be discovered). *Dim.* 8-9 x 2½-3 mm.

Hab.—Queensland: Johnstone River (H. W. Brown), Endeavour River (Melbourne Mus.), Cairns (Coll. Lea).

Six examples, three of each sex, examined. It is nearest *albo-sparsa* C. & G. and *tyrrhena*, n.sp. but unlike either. The coppery pronotum and underside are as in *Melobasis pyritosa* Hope. The colour of the elytra is elusive and variable with the light on it, that of the male type being suffused with blue.

Types in Coll. Carter.

CISSEIS MARMORATA C. & G. var. PRASINA, n.var.

Two examples (male) in the British Museum and two in the South Australian Museum (Blackburn Coll.) are structurally so close to *similis* Saund. that I consider them colour varieties of that species, of which the males, as in many others, have the head, thorax and underside green or bronze-green. In those under notice the whole surface is metallic green, in one example peacock blue-green. *Dim.* 14-16 x 3½ mm.

Hab.—N.S. Wales (Saunders Coll. Brit. Mus.).

C. viridicollis Thoms. has been already noted as probably the male of *marmorata* C. & G.

CISSEIS TYRRHENA, n.sp. (Text-fig. 3.)

Elongate ovate. Head, pronotum, underside and appendages coppery bronze (head sometimes green) elytra brilliant purple or violet, with six not very clearly defined spots in a circular formation (as in *albo-sparsa* C. & G.), i.e., two near apex, two near sides, and two near suture near middle of elytra.

Head canaliculate and depressed in middle, finely and densely punctate.

Prothorax: Apex and base bisinuate, sides arcuately narrowed to apex, anterior angle obtuse, posterior subrectangular, upper carina *not* extending to apex; subcentrally punctate, with a foveate impression on each side near base. *Scutellum* transversely oval. *Elytra* rather narrowly oblong, covered with scale-like punctures, apices finely rounded, minutely serrulate. *Sternum* coarsely, abdomen very finely punctate, the segments of latter with albobubescant spots at sides (in fresh examples). *Dim.* 5.5-7 x 2-3 mm.

Hab.—N.W. Australia (DuBoulay and Saunders Coll. Brit. Mus.), Kalamunda (H. M. Giles), Bunbury and Perth (J. Clark), Pinjarra (A. M. Lea).

Many examples show a distinct species of narrowly oblong form, and of brilliant colours, somewhat suggesting *nitida* Kerr. The elytral pubescent spots

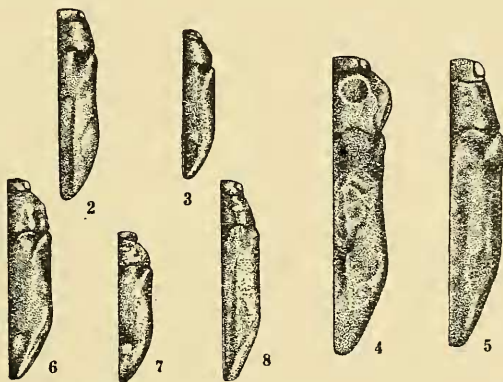
can just be made out in some cases. Variations without the pubescent spots, sometimes with more obscure pronotum are in the British Museum, labelled Albany. The broader examples, where examined, are female and these in general show the maculae more clearly. Type in Coll. Carter.

CISSEIS LATICOLLIS, n.sp. (Text-fig. 4.)

Elongate, oblong-obovate, subopaque bronze-violet above, pygidium tinged cyaneous, elytra with a vague, pubescent, fasciate impression near apex, and some pubescence near middle and sides; underside dull coppery bronze, often with a violet or bluish tinge—legs and tarsi following the colour of underside—antennae bronze.

Head coarsely punctate, sparsely pubescent with a large, oval medial impression.

Prothorax: Apex arcuate, base strongly bisinuate, sides very widely rounded, greatest width in front of middle, apex as wide as base, anterior angles (from above) acute, posterior obtuse, the two lateral carinae widely separated, sinuately



Text-fig. 2. *Cisseis inflammata*, n.sp. Text-fig. 3. *C. tyrrhena*, n.sp. Text-fig. 4.

C. laticollis, n.sp. Text-fig. 5. *C. elliptica*, n.sp. Text-fig. 6. *C. ovalis*, n.sp.

Text-fig. 7. *C. pulchella*, n.sp. Text-fig. 8. *C. careniceps*, n.sp.

parallel till near base; a large fovea near apex, surface closely and finely, transversely rugose except a wide, nearly smooth, medial space; fresh examples with a fine grey pubescence scattered over greater part. *Scutellum* very transverse. *Elytra* wider than prothorax at base and three and a third times as long, compressed near middle, enlarged behind; apices widely and minutely serrulate, these not covering pygidium and coarsely punctate; disc covered with scale-like punctures (much closer than in *similis* Saund.) these coarser towards apex; underside minutely punctate, with a sparse short pubescence. *Dim.* 11-14 x 4-5 mm.

Hab.—Queensland: Wide Bay (British and Australian Mus.), Brisbane (Queensland and S. Aust. Mus.).

A curious, irregular elongate species that can only be confused with *similis* Saund., from which it is clearly separated as follows:

C. similis.

Prothorax widest behind middle, sides
lightly rounded.

Elytra nitid, oblong-ovate.

Type in British Museum.

A male example in the Queensland Museum is much smaller (9 x 3.3 mm.) and has the head, pronotum and underside green or bronze green.

Var. *CYANEOPYGA*, n.var.

Two examples from Western Australia (Lake Anstin—H. W. Brown, in Coll. Carter) and British Museum, differ from the typical *laticollis* in having the *prothorax* widest at middle, the *elytra* less widened behind, the pygidium bright blue, or blue-green. In the British Museum example the pronotum is also suffused with blue-green. This may prove, with the study of further material, to be distinct.

CISSEIS ELLIPTICA, n.sp. (Text-fig. 5.)

Elongate elliptic, bronze or violet bronze, moderately nitid. The pronotal depressions pubescent as well as irregular pubescence on *elytra*, underside strongly pubescent, abdomen (in fresh examples) covered with white flocculence.

Head rather flat, finely channelled and pubescent, vertex coarsely punctate.

Prothorax: Apex moderately, base strongly bisinuate, sides nearly straight, obliquely widening from apex to base, lateral carinae not parallel, the upper more sinuous than lower and continuous to apex, the lower unseen from above; all angles acute, the posterior wider; disc with two longitudinal depressions, one interrupted, irregular and wide on each side of middle, the other narrower inside apparent margin; finely sparsely punctate at middle, coarsely and transversely rugose towards sides. *Scutellum* transversely oval, punctate. *Elytra* lightly enlarged at shoulders, elliptically narrowed behind, apices separately rounded, hind margins strongly serrated, surface covered with scaly punctures, somewhat as in *similis* Saund., but becoming denser and finer towards apex; near base some longitudinal depressions continuous with those on pronotum. Underside, where not obscured by pubescence, coarsely punctate. *Dim.* 14 x 5 mm.

Hab.—Western Australia: Cue and Tenindewa (H. W. Brown).

Two examples given me by their captor are abundantly distinct from *laticollis* and *similis* by their convex elliptic form, oblique straight-sided *prothorax* with its unusually defined hind angles. Types in Coll. Carter.

Var. *FRONTALIS*.

Two examples (the sexes) from N. Queensland (Kuranda—Dodd in Coll. Carter, and Herberton—Queensland Mus.) differ in having the head arcuately depressed between eyes, the sides of the arch raised above the level of the eyes and the underside nitid, lightly pilose, without flocculence.

CISSEIS OVALIS, n.sp. (Text-fig. 6.)

Widely oval; head, pronotum, underside and legs green, *elytra* coppery green, vaguely impressed near apex, antennae and tarsi blue.

Head arcuately impressed in middle, coarsely punctate.

Prothorax: Apex and base bisinuate, the latter with medial lobe very wide, sides subparallel on basal half, thence arcuately narrowed to apex, space between lateral carinae oval, upper carina not continuous to apex; two wide impressions near base, disc moderately convex, rather densely, subconcentrically rugose-punctate. *Scutellum* transversely oval. *Elytra* oval, apices widely,

scarcely separately rounded, margins near apex finely serrate, almost uniformly scabrous punctate, a few vague, sub-pubescent impressions near sides and apex, underside very nitid and densely punctate, sides of abdomen with pubescent impressions. *Dim.* 9 x 4 (vix) mm.

Hab.—Western Australia (Du Boulay in British Museum).

A single example, probably male, is quite unlike any of the described metallic green species. In shape near *opima* Thoms., in colour unlike any—though in this as also in elytral sculpture it is near *roseo-cuprea* Hope. Type in British Museum.

CISSEIS PULCHELLA, n.sp. (Text-fig. 7.)

Oval. Head green or golden, pronotum and scutellum brilliant golden copper, elytra amethyst blue, with subfasciate white pubescence near apex; underside green, tinged with blue, sides of abdomen apparently non-pubescent; legs, tarsi and greater part of antennae blue, basal joints of last coppery.

Head lightly excavate, longitudinally canaliculate, densely and finely punctate.

Prothorax: Apex and base bisinuate, narrowing from base to apex in slight curve, anterior angles obtuse, posterior acute from above; upper carina continuous to apex, lower unseen from above, surface finely transversely strigose, transversely depressed near posterior angles. *Scutellum* large, transversely oval with triangular extension behind. *Elytra* with fine silky surface having minute scale-like divisions, scarcely punctate; apices separately rounded, their margins minutely serrulate, underside minutely punctate. *Dim.* 7 x 2½ mm.

Hab.—Queensland: Cooktown (H. Hacker, in Melbourne Mus.), Herbert River (Queensland Mus.).

Three specimens of this brilliant little Buprestid are before me. In colour it is similar to *Melobasis cyaneipennis* Boh. (except for the elytral pubescence) and unlike any described species. Type in National Museum, Melbourne.

CISSEIS CARENICEPS, n.sp. (Text-fig. 8.)

Elongate elliptic, navicular. Head, pronotum, underside and appendages coppery bronze, elytra varicoloured, two examples chiefly violaceous, tinged cyaneous, the third example bluish-green; in all cases the suture (narrowly), apex and apical margins fiery coppery.

Head rather flat, with a dense longitudinal system of puncturation, and a well raised longitudinal carina in middle extending from between the antennal orbits to half-way between the eyes.

Prothorax: Apex lightly, base strongly bisinuate, laterally convex, sides nearly straight, gently narrowed from base to apex; anterior angles obtuse, posterior acute (both from above); disc transversely striolate; rugose at sides; upper lateral carina unusually short, terminating some distance from apex. *Scutellum* transversely triangular. *Elytra* subparallel on basal half, finely narrowed at apex, apical margins minutely serrulate, disc irregularly punctate, punctures dense near base; finely scabrous-punctate near suture and apex, rather coarsely, transversely rugose-punctate on rest. Underside transversely striolate, with some faint lateral impressions on abdominal segments. *Dim.* 8.9 x 3 mm.

Hab.—Western Australia (Du Boulay) and N.S.W. (Saunders's Coll.).

Three examples, labelled as above in the British Museum, show a species of

iridescent pattern, remarkable for the well developed frontal carina and absence of elytral pubescence.

C. subcaenifrons Thoms., from King George's Sound, besides colour differences, has the following characters at variance with the above (1) "caput-linea media longitudinale *obsolete* instructum"; (2) Prothorax "subglobulosocylindricus, nec transversus"; (3) 7 mm. long. Type in British Museum.

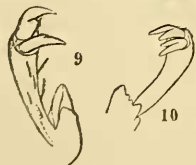
NEOSPADES Black.

Distinguished from *Cisseis* by (1) the lateral claws strongly bifid, (2) the basal joints strongly compressed, the posterior with basal joint scarcely longer than the second. The head is more or less bilobed, which is very exceptional in *Cisseis*, and the form, in general, parallel and convex.

Neospades forms a convenient subdivision of the larger genus *Cisseis*. (See Text-figs. 9 and 10 for characteristic claws of *Cisseis* and *Neospades*.)

Table of species.

1	7	Elytra chiefly golden, or green, with blue or purple marking, with or without pubescent impressions.	
2	4	Blue markings consisting of two spots and a post-medial fascia.	
3		Ground colour fiery copper, apex non pubescent.	<i>cruciata</i> F.
4		Ground colour golden green, apex with two pubescent spots.	<i>cuprifera</i> Gestro.
5	7	Darker markings covering wide apical area with pubescent spots thereon.	
6		Darker markings continuous, along suture, to base, sides of pronotum nearly straight.	<i>lateralis</i> Blackb.
7*		Darker markings not continuous to base, sides of pronotum rounded.	<i>chrysopygia</i> Germ.
8	14	Elytral markings consisting of pubescent spots on a unicoloured ground.	
9	11	Ground colour of elytra dark, form subcylindric.	
10		Whole surface dark bronze, tinged violaceous.	<i>gouldii</i> Hope.
11		Pronotum golden coppery, elytra dark blue.	<i>simplex</i> Blackb.
12	14	Ground colour brilliant golden green.	
13		Elytra with two pubescent spots close to apex—the subapical spots clearly separate.	<i>viridiaenea</i> Mael.
14		Elytra without pubescence close to apex—the subapical pubescence subfasciate.	<i>terrae-reginae</i> Théry.
15	17	Elytra without pubescence.	
16		Colour bronze-black.	<i>nigro-aenea</i> Kerr.
17		Colour golden green.	<i>viridis</i> Kerr.



† Text-fig. 9.

‡ Text-fig. 10.

Synonymy.—(a) *lateralis* Blkb. = *splendida* Kerr.

(b) *chrysopygia* Germ. = *dimidiata* Mael. = *apicalis* Mael.
= *purpureo-tincta* Mael. = *semi-rugosa* Thoms. = ? *semi-scabrosa* Thoms.

(c) *cuprifera* Gestro = *cuprifera* Thoms.

(d) *simplex* Blackb. = *bella* Blackb. = (?) *nigripennis*

Mael. = *ignicollis* Kerr.

(e) *viridi-aenea* Mael. = *nitida* Kerr. = *viridicuprea* Kerr.

* *N. Picta*, n.sp., described below was received after this manuscript was complete, and would follow *chrysopygia* in the table.

† Hind tarsal claw of *Cisseis leucosticta* Kirby.

‡ Hind tarsal claw of *Neospades lateralis* Blackb.

(a) Types compared. The example of *lateralis* (cotype) in the Kerremans Coll. was abnormally coloured, and evidently misled him.

(b). I have previously recorded the synonymy of Macleay's three species with *semirugosa* Thoms. I now accept Blackburn's determination of *chrysoptygia* Germ. for examples in the South Australian Museum, which are clearly conspecific. The species is common and widely spread in Queensland, South and Western Australia.

VAR:

Two examples in the British Museum and one in the South Australian Museum have pubescent spots irregularly scattered over the apical half of elytra, besides the two regular spots usually found in this species.

(c). Previously recorded by me (Arkiv för Zoologi, Band 13, No. 22, 1920).

(d). I have above noted the strong similarity between *N. simplex* Blackb. and *Cisseis cupreicollis* Hope. The description as to colour "viridis, aureomicans; elytris apacis obscure-aeneis" is misleading. The type has the pronotum and underside a brilliant golden green; the elytra are blue-black with pubescent spots (in fresh specimens in my collection, violet or clear blue as in *C. 12-maculata* F.) with coppery tints at suture and apex. When the pubescence is abraded, the forms like *bella* and *ignicollis* appear, and I believe *nigripennis* Macl. to be a discoloured example of the same.

(e). I have closely compared the types, and find only slight differences of size and colour.

Terrae-reginae Théry is very near *viridi-aurea* Macl. but has its pubescence differently placed, *inter alia*.

Nigro-aenea Kerr. is differentiated from *viridis* Kerr., not only by colour, but by the close and deep sculpture of the former. Both are from Queensland.

NEOSPADES PICTA, n.sp.

Oblong, lightly attenuate in front and behind; head pronotum, basal parts of elytra, underside and appendages nitid coppery bronze, apical two-thirds of elytra brilliant violet with preapical and medial pubescence.

Head coarsely, not very closely punctate, forehead sub-bilobate (as in *Cisseis pygmaeus* Blackb.), eyes large and prominent.

Prothorax transverse, apex strongly produced in middle, base bisinuate, sides rather straight, the inferior carina evident from above, widening from base to near apex, thence arcuately narrowed; whole surface coarsely, concentrically rugose, about a smooth oval spot situated at the apex of the front medial production. *Scutellum* transverse with a triangular extension behind, coarsely punctate. *Elytra* of same width as prothorax, separately rounded at apex, the bronze area extending to basal third at suture, nearly half-way at sides, the violaceous area thus forming an oval extension near suture. Pubescent markings (1) a sub-fasciate preapical one, consisting of a rounded patch on each side of suture and a disconnected transverse one extending to sides, (2) a more vague medial pubescence evident on sides, subobsolete on disc. Surface coarsely scalose-punctate, the scales arranged in irregular transverse ridges, these coarser on bronze, lighter on violet areas, underside lightly punctate. *Dim.* 6 x 2 mm.

Hab.—Queensland: Brisbane (G. H. Hardy).

Two examples from the Queensland Museum show the typical *Neospades* structure—cylindric form, lightly divided head and forked claws. In one example the head is more brilliantly metallic than the pronotum, with a tendency to green at the sides. In my tabulation the species would follow *chrysopygia* Germ., from which it differs in its smaller, especially narrower, form; in its less deeply rugose surface, besides colour. Type in the Queensland Museum.

HYPOCISSEIS THOMS.

(= *Maschalix* Waterh. = *Cisseoides* Kerr.)

- | | | |
|----|----|---|
| 1 | 10 | Colour blue-black or black, with white pubescence. |
| 2 | 4 | Form wide, obliquely narrowed in front and behind. |
| 3 | | Head widely excavated, crested near eyes. <i>latipennis</i> Macl. |
| 4 | | Head lightly excavated, without frontal crests. <i>brachyformis</i> Deyr. |
| 5 | 10 | Form elongate oblong. |
| 6 | | 12 mm. long, head widely excavated, eyes bordered within by narrow ridge. <i>pilosicollis</i> Blackb. |
| 7 | | 8-9 mm. long, head lightly excavated, front scarcely ridged. <i>suturalis</i> Saund. |
| 8 | 10 | Head bilobed (somewhat as in <i>Ethon</i>), frontal lobes extended in front of eyes. |
| 9 | | Sub-apical pubescence vague and straight. <i>cyanura</i> Kerr. |
| 10 | | Sub-apical pubescence forming parallel zig-zags. <i>minuta</i> , n.sp. |
| 11 | | Colour bronze with blue markings; head widely excavated and ridged. <i>ornata</i> , n.sp. |

Notes and Synonymy of the above.

Hypocisseis Thoms. = *Maschalix* Waterh. = *Cisseoides* Kerr.

Waterhouse seems to have been unaware of Macleay's species in describing *Maschalix latipennis* as well as of Thomson's genus erected for the reception of *Cisseis latipennis* Macl. *Cisseoides* is to my mind superfluous, its distinctions from *Hypocisseis* being slight and of doubtful value. Kerremans himself described *aneipes* (infra) as a *Hypocisseis*.

(a) *H. (Cisseis) latipennis* Macl. = *cornuta* Gestro. = (*Maschalix*) *latipennis* Waterh. = *laticornis* Thoms.

(b) *H. (Coraebus) pilosicollis* Blackb. = *Cisseoides murina* Kerr.

(c) *H. (Cisseis) suturalis* Saund. = *Coraebus marmoratus* Macl. = *Cisseoides albopicta* Kerr. = *Hypocisseis aneipes* Kerr.

(d) *H. (Cisseoides) cyanura* Kerr. = *C. modesta* Kerr.

With regard to (a), I have seen the types of Macleay and Waterhouse while the descriptions of *cornuta* and *laticornis* make this synonymy certain.

(b) Types examined at different times by me—but I am satisfied as to their identity.

(c) Examples compared with Macleay's type are in my Collection—the other types have been closely compared. This species is widely distributed from Queensland to Western Australia, and variable in size, and sometimes in appearance through abrasion of its pubescence.

(d) The two types show slight colour variations only. *H. brachyformis* Deyr., described from Myzole, is also found in Queensland. I have two examples from Rockhampton taken by Mr. H. W. Brown. It differs from *latipennis* in smaller size, flatter head, absence of frontal crests, the pronotum not channelled, its sides rounded, its legs dark *inter alia*.

HYPOCISSEIS MINUTA, n.sp. (Text-fig. 11.)

Oblong ovate, blue-black; elytra with transverse undulate impressions of white pubescence, underside and appendages cyaneous.

Head canaliculate and divided, somewhat as in *Ethon*, but the bilobed front produced in front of the eyes and more or less clothed with coarse, yellow hair, surface at vertex nearly smooth or very finely rugose.

Prothorax very transverse convex, apex and base bisinuate, sides widely rounded, the two carinae enclosing a small narrow area, the convex disc surrounded at base and sides by horizontal depression more clearly cyaneous than the rest—the finely rugose sculpture largely concealed by shagreen clothing. *Scutellum* large, transversely oval. *Elytra* oval, rather widely rounded at apex, apices scarcely separately rounded, and minutely serrulate; on apical area two parallel zig-zag pubescent impressions, a third and fourth similar impressions, decreasingly defined in proportion to distance from apex, a fifth vaguely-seen lunate pubescence behind scutellum from shoulder to shoulder. Surface elsewhere finely rugose, abdomen with a fine, short pubescence, breast minutely punctate. *Dim.* 4.5 x 1.7-2 mm.

Hab.—Queensland: Johnstone River (H. W. Brown), Cape York (Coll. Carter).

Four examples in the South Australian Museum, also 3 in Coll. Carter (one from C. York) show a species near *cyanura* Kerr. (= *modesta* Kerr.) of which I have seen the types. *Minuta* is distinguished from this, *inter alia*, by (1) lobes of head being pressed closely together—in *cyanura* widely V-shaped, (2) different pattern of elytral impressions—straight in *cyanura*. Types in South Australian Museum.

N.B.—There is only a slight colour difference between the unique types of *cyanura* and *modesta*—both from Gaydah.



11

12

Text-fig. 11.

Hypocisseis minuta, n.sp.

Text-fig. 12.

H. ornata, n.sp.

HYPOCISSEIS ORNATA, n.sp. (Text-fig. 12.)

Oblong, bronze, subnitid with the following markings cyaneous: a transverse fascia at base of pronotum, elytra with post-humeral spot and preapical fascia, interrupted at suture.

Head: A deep concavity between eyes, the sides or flanges of concavity jutting beyond the eyes, each flange with a large fovea within, eyes rather flat; width of head less than that of prothorax at apex. *Prothorax convex* and uneven in surface, rather gibbous and subangulately produced at apex in middle, base bisinuate, widest at middle, basal half subparallel, thence subangulately narrowed to apex, upper carina very short and sinuous, widely separated from lower carina in front; irregularly, transversely depressed near base, the depression more or less cyaneous. *Elytra* oblong-acuminate, obliquely narrowed behind, with four longitudinal callosities near base, one on each side of scutellum, and one on each shoulder, the latter connected with a little raised costa extending obliquely from shoulder to middle of elytra near apical declivity; a transverse gibbosity also behind scutellum. Surface closely and finely punctate, the cyaneous markings vaguely outlined by white pubescence. Underside glabrous and more coarsely punctate. *Dim.* 4½-6 x 2-2½ mm.

Hab.—South Australia: Lucindale (Feuerheerdt); Western Australia: Geraldton (W. D. Dodd).

Eight examples of this pretty little insect examined. The arcuately excised head is somewhat as in *suturalis* Saund., or (*Coraeus*) *pilosicollis* Blackb., but the excision is deeper and wider. In two examples the blue markings on thorax and side of elytra are not very clear. The species is a bridge between *H. latipennis* Macl. and *suturalis* Saund. Types in the South Australian Museum.

ALCINOUS Deyr.

Ann. Soc. Ent. Belg., 1864, p. 115; Kerr., *ibid.*, 1898, p. 174.

Synonymy.—*A. nodosus* Kerr. = *A. minor* Kerr.

I have examined the types and consider them mere variations of a species that I have taken in many localities of Eastern Australia. The genus is somewhat intermediate between *Cisseis* and *Agrilus*, of shorter form than the latter, and readily distinguished from *Cisseis* by its irregular, nodulose surface. Like *Cisseis* it also occurs on foliage, chiefly *Acacia*—in the coastal brush areas of Queensland and New South Wales, but I have also taken an example at Yea, Victoria.